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09/874,256	06/06/2001	Hiromu Mukai	54024-036	5952

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EXAMINER	
TRAN, NHAN T	
ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/874,256	MUKAI ET AL.	
	Examiner	Art Unit	
	Nhan T. Tran	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 12/7/2005 with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Specification

2. A new title submitted on 12/7/2005 was received and accepted.

Claim Objections

3. Claim 10 is objected to because of recitation of "an other portable terminal" in line 2 of the claim. This limitation should be corrected as --another portable terminal--.

Claim 13 is also objected to because of recitation of "the input telephone" in line 1 of the claim, "the input section" in line 3 of the claim, and "the display module 505" in lines 4-5 of the claim. These limitations should be *respectively* corrected as --an input telephone--, --an input section--, and --a display module--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 11 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the use of **either** a joy stick 16, a track ball 161 or a track pad 162 in addition to the use of jog dial 17a in a single portable terminal or a single embodiment (Figs. 15, 19 & 20 and specification on page 20) does not reasonably provide enablement for using **all** of the above mentioned joy stick 16, a track ball 161, a jog dial 17a **and** a track pad 162 in a single portable terminal or embodiment. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. See MPEP 2164.01(a) and 2164.04.

It is noted that the 35 U.S.C 112 first paragraph rejection above can be overcome by amending the claim as -- wherein said input member including at least one of a jog dial, a joy stick, a track ball and a track pad --, or -- wherein said input member including a jog dial, a joy stick, a track ball or a track pad --.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 10, 12 & 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Britz (US 5,414,444).

Regarding claim 10, Britz discloses a portable terminal (video phone; Figs. 1 & 2) operable in an image pickup mode for acquiring an image and a communication mode (i.e., a cellular mode) for communicating information with another portable terminal , the information including voice data and image data (see col. 2, line 9 – col. 3, line 4), the portable terminal comprising:

a main body (body 100; Fig. 1);

an image pickup unit (camera 115; Fig. 2) having an optical system and an image pickup element, for picking up an image of a subject (see details in Fig. 5; col. 3, lines 24-31);

a pivot mechanism (Figs. 4, 7 & 9) for supporting said image pickup unit, said image pickup unit being allowed to freely pivot centered on at least two axes (axes 703 and 704 shown in Fig. 7) with respect to said main body (see col. 4, lines 16-22, 37-40);

an input member (user interface comprising keypad 103, lever 310 and touch screen, etc...) provided at the main body of the portable terminal and which receives pivotal operation inputs (either electronically or manually) to the image pickup unit in the image pickup mode (see Figs. 1 & 2; col. 3, line 5 – col. 4, line 46), said input member receiving operation inputs (from keypad 103 for dialing a phone number in a cellular mode) related to information communications in the communication mode (see col. 2, lines 9-16, 62-66).

Regarding claim 12, it is clear that the input member (keypad 103) receives operation inputs related to an input of a telephone number in the communication mode (Fig. 1 and col. 2, lines 9-16, 62-66).

Regarding claim 13, Britz also discloses an input telephone to receive operation inputs with respect to the image pickup unit and a communication mode for allowing an input section of the telephone to receive operation inputs related to information communication, according to whether the camera is attached to or detached from a display module (see Figs. 1 & 2; col. 2, lines 46-66, wherein the camera 115 is attached or detached from a display module 101).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,535,239 B1) in view of Nishimura et al (US 6,734,914 B1).

Regarding claim 1, a portable terminal for transmitting and receiving information to and from the portable terminals, the information including voice data and image data (see Figs. 1A & 1B; col. 1, lines 13-18), the portable terminal comprising:

a main body (Figs 1A & 1B), the main body including a casing (1) and a display (LCD 36, 13) surrounded by the casing the display configured to display various information including information (audio channel number) associated with the voice data and information (video channel number) associated with the image data (see col. 4, lines 8-58);

an image pickup unit having an optical system (lens 43) and an image pickup element (camera circuit 41), for picking up an image of a subject (see Figs. 1B & 3; col. 7, lines 15-19).

Kim does not explicitly disclose a pivot mechanism for supporting the image pickup unit, the image pickup unit being allowed to freely pivot centered on at least two axes with respect to the main body. **Nishimura** teaches a camera apparatus (Fig. 2) that is constructed with a pivot mechanism (Figs. 2, 9 & 10) and to support an image pickup unit (5) which is allowed to freely pivot centered on at least two axes (X and Y axes) with respect to the main body (col. 4, lines 24-40). According to Nishimura, such a structure is advantageous in that camera shake is eliminated to improve image quality (Nishimura, col. 8, lines 9-16) and a self-timer photography is easily performed at various angles (i.e., pan, tilt directions) relative to the camera position without using a tripod or panhead (Nishimura, col. 5, lines 60-67).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the portable apparatus of Kim to include the teaching of Nishimura to arrive at the Applicant's claimed invention so as to enable image stabilizer for improving image

quality, and also to provide capability of panning and tilting without moving the whole apparatus, thereby a highly operable portable apparatus would be realized.

Regarding claim 2, it is clear in Kim the image pickup unit is non-detachably housed in the main body (see Kim, Figs. 1A & 1B).

Regarding claim 3, Nishimura also discloses that the pivot control of the image pickup unit as analyzed in claim 1 further comprises a driving section (direction controller 12) for allowing image pickup to pivot centered on at least two axes (Nishimura, Figs. 2, 5-8A); an input section (see Figs. 2-8A for any input section connected to the controller 12) for receiving inputs of at least two parameters (i.e., amount for driving the image pickup unit about X and Y axes) as operation units of a pivotal operation of the image pickup unit (Nishimura, col. 5, lines 8-67; col. 6, lines 40-52; col. 7, line 25 – col. 8, line 16).

Regarding claim 4, see the analysis for the combination of Kim and Nishimura. Furthermore, Kim discloses a second embodiment (Figs. 2A-2C) in which the image pickup unit (at lens 43) is directed to a front face (Fig. 2B) and a rear face of the main body (Fig. 2C) by rotation of a support shaft 1b. See Kim, col. 3, lines 40-48 and col. 4, lines 22-31. Therefore, it would have been obvious to one of ordinary skill in the art to configure image pickup unit in Kim and Nishimura for not only being able to rotate about two axes but also being able to rotate 180 degrees from front face to back face of the

main body using a support shaft in addition to the pivot mechanism so that the user would be able to view captured images on the display during capturing subject images regardless subject location at front side or back side of the main body.

Regarding claim 5, it is clear that the image pickup unit in Nishimura is allowed to pivot centered on an axis parallel to a light axis of the optical system by the pivot mechanism (Nishimura, Figs. 1-10).

Regarding claim 6, Kim discloses a switching section (30) for switching operation modes between an image pickup mode (N mode) for allowing said input section to receive said operation inputs with respect to said image pickup unit and a communication mode (X or R mode) for allowing said input section to receive an operation input related to information communication (see Kim, col. 6, lines 22-56).

Regarding claim 7, Although Kim does not teach that a pair of the image pickup units and a pair of the pivot mechanism are installed, these features are further taught by Nishimura in Fig. 7, col. 7, lines 25-56 to provide a stereoscopic image which the user would see in practice at one place can be realized in virtual space. Therefore, it would have been obvious to one of ordinary skill to combine the teachings of Kim and Nishimura to implement a pair of image pickup units and a pair of pivot mechanism so as to provide the apparatus with a stereoscopic mode for enabling a virtual reality which would be useful in some situations as taught by Nishimura in col. 7, lines 25-56.

Regarding claim 8, Kim is silent about a section for detecting a position of a specific subject in said image; and a section for controlling said driving section so as to place said specific subject virtually in the center of the image. However, Nishimura teaches a section for detecting a position of a specific subject in the image (image recognition unit 14) and a section for controlling the driving section are implemented so as to place the specific subject virtually in a center of the image by tracing the subject to ensure that the subject is fully exposed within the camera field of view (see Nishimura, Figs. 5 & 7; col. 6, lines 40-57). Therefore, it would have been obvious to one of ordinary skill in the art to modify the apparatus in Kim in view of Nishimura's teaching to arrive at the Applicant's claimed invention for tracing the subject in an image to ensure that the subject is fully exposed within the camera filed of view.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim and Nishimura et al as applied to claim 3 and in further view of Ueyama (US 6,078440).

Regarding claim 9, Kim and Nishimura disclose that the input section comprises a section for detecting an amount of rotation of the image pickup unit 5 (see direction sensor 6 in Nishimura, Fig. 2 and col. 4, lines 59-63). Nishimura does not specifically discloses in details that the input section comprises a disc-shaped rotation member that is rotatively driven; a section for detecting an amount of rotation of said rotation member; a section for detecting a force in a first direction given to said rotation member;

and a section for detecting a force in a second direction given to said rotation member, wherein two parameters included in said at least two parameters are inputted as said amount of rotation detected together with a detection of said force in said first direction and as said amount of rotation detected together with a detection of said force in said second direction.

Ueyama teaches a direction sensor comprises a disc-shaped rotation member (Fig. 3) that rotatively driven; a section for detecting an amount of rotation (27a, 27b) of the rotation member, a section (27a) for detecting a force in a first direction given to the rotation member (note that 27a is inherently used to detect a force in a first direction by virtue of detecting an amount of rotation since the rotation is caused by an applied force), a section (27b) for detecting a force in a second direction given to the rotation member (note that 27b is inherently used to detect a force in a second direction by virtue of detecting an amount of rotation since the rotation is caused by an applied force); wherein two parameters included in the at least two parameters are inputted as the amount of rotation detected together with the inherent detection of force in the first and second directions. See Ueyama, col. 4, lines 42-57.

Therefore, it would have been obvious to one of ordinary skill in the art to modify the apparatus in Kim and Nishimura to construct the direction sensor as an input section having all necessary components taught by Ueyama for detecting directional movement information of a spherical rotary image pickup unit and for inputting the detected information to the controller (12). Such the modification would provide accurate movement detection and driving of the image pickup unit in an arbitrary direction while

maintaining light weight and small size with small driving force (see Ueyama, col. 2, lines 50-53).

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Britz (US 5,414,444) in view of Kubo et al (US 6,795,715 B1). *This rejection is based on Examiner's assumption that the input member includes a joy stick and a jog dial in view of the claim rejection under 35 U.S.C. 112, first paragraph above.*

Regarding claim 11, Britz discloses that the input member includes a joy stick (lever 310; Fig. 3, col. 3, line 37). Britz is silent about a jog dial. However, Kubo teaches a video phone (Fig. 1 or 6) that includes a jog dial (8) as a part of user interface for receiving operation inputs from the user (see Kubo, col. 5, lines 7-12).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Britz and Kubo to provide a jog dial as a part of user interface so that the user would quickly select an operation mode or a phone number from a phone list by rotating the jog dial.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NT.

TUAN HO
PRIMARY EXAMINER